10/524,203 MAT-8657US

Amendment Dated: May 2, 2008
Reply to Office Action of: March 13, 2008

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

## Listing of Claims:

Application No.:

- 1. (Currently Amended) A digital signal receiver comprising:
- a reference signal generator for generating a first reference signal;
- a base band transform circuit for converting a first high-frequency signal with digital modulation into a base band signal with using the first reference signal;
  - a frequency divider to divide the frequency of the first reference signal:
- a frequency multiplier to multiply a frequency of a signal output from the frequency dividerwherein an output frequency of the frequency multiplier is a product of the divided first reference signal produced by the frequency divider and a magnitude of the frequency multiplier; and
- a digital demodulator to demodulate a signal output from the base band transform circuit with using the signal output from the frequency multiplier as a reference signal,

wherein the first reference signal is generated independent of the signal output of the frequency multiplier.

- (Original) The digital signal receiver of claim 1, further comprising a
  frequency converter for receiving a second high-frequency signal modulated by the
  digital signal and converting a frequency of the second high-frequency signal to
  generate the first high-frequency signal.
- (Original) The digital signal receiver of claim 2, wherein the frequency converter converts the second high-frequency signal into the first high-frequency signal with using the first reference signal.

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4. (Original) The digital signal receiver of claim 1, wherein the first high-frequency signal is modulated by the digital signal by Orthogonal Frequency Division Multiplexing system, and the digital demodulator comprises an Orthogonal Frequency Division Multiplexing demodulator.

5. (Original) The digital signal receiver of claim 1, wherein the base band transform circuit comprises an orthogonal base band transform circuit operable to

convert the first high-frequency signal into a first base band signal and a second base band signal orthogonal each other and

output the first base band signal and the second base band signal.

- 6. (Original) The digital signal receiver of claim 5, wherein the orthogonal base band transform circuit includes
- a  $90^{\circ}$ -phase shifter for shifting a phase of the first reference signal by 90 degrees,
- a first mixer for mixing the first reference signal with the first high-frequency signal to convert the first high-frequency signal into the first base band signal, and
- a second mixer for mixing the second reference signal with the first high-frequency signal to convert the first high-frequency signal into the second base band signal.
- (Original) The digital signal receiver of claim 1, further comprising a device including the frequency divider and at least one of the base band transform circuit and the frequency converter.
- 8. (Original) The digital signal receiver of claim 1, further comprising a device including the digital demodulator and the frequency multiplier.
- (Original) The digital signal receiver of claim 1, further comprising a low-pass filter for receiving a signal output from the frequency divider and outputting a signal to the frequency multiplier.

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(Previously Presented) The digital signal receiver of claim 7, further 10. comprising a further device including the digital demodulator and the frequency multiplier.

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